

The Town of Walpole

## Construction Site Stormwater Runoff Control



2019

Prepared by:  
The Town of Walpole

With assistance from:



## **MCM 4: Construction Site Stormwater Runoff Control**

### **1.1 Introduction**

The municipal separate storm sewer system (MS4) permit issued by the Environmental Protection Agency (EPA) to the Town of **Town of Walpole (hereafter “the Town”)** requires the implementation of a construction site stormwater runoff control program that prevents pollutants from construction site stormwater runoff from entering the Town’s MS4. In addition, the MA Wetlands Protection Act and the **Town’s Wetland Protection Bylaw** extend similar protections to discharges directly to wetlands and waterways.

This document references the Town’s construction site stormwater runoff control program in detail and specific authority in the **Town’s Stormwater and Erosion Control Bylaw**. This document was prepared based on a model provided by the Neponset Stormwater Partnership (NSP) and funded in part through a Community Innovation Challenge Grant and contributions from NSP member communities.

### **1.2 Program Purpose**

In the absence of appropriate and well-maintained controls, stormwater runoff from construction sites will discharge very high concentrations of harmful pollutants into MS4s and/or local waterways, and ultimately degrade local water quality. In addition to harmful solid wastes and chemicals that are commonly found on construction sites, sediment in construction site runoff is often the most destructive.

While sedimentation of streams and rivers is a naturally occurring process, un-managed sediment from construction site runoff fills and clogs waterways at a high rate, causing severe physical and biological harm to local habitat and water quality, and exacerbating flooding.

Land disturbing activities and new construction projects including redevelopment are important for economic growth, public access and safety, and overall improvements of daily life.

Establishment of a legal authority to implement construction site stormwater runoff control will help prevent sediment as well as construction site debris and chemicals from entering local water systems while still allowing for construction activity.

### 1.3 Program Schedule

The MS4 permit defines the timeline for implementing the Town's Construction Site Stormwater Runoff Control Program as summarized in Table 1 below.

**Table 1. Program Schedule**

<b>Construction Site Stormwater Runoff Control Task</b>	<b>Permit Schedule</b>
Sediment and Erosion Control Bylaw Adoption	May 01, 2008
Written Site Plan Review Procedures Adoption	Year 1 (June 30, 2019)
Written Site Inspection Procedures Adoption	Year 1 (June 30, 2019)
Implementation of Sediment and Erosion Control Program	Ongoing

## 1.4 Responsible Parties

The Town's **Stormwater and Erosion Control Bylaw** empowers the **Conservation Commission** to enforce the construction site stormwater runoff control provisions of the bylaw. The **Conservation Commission** has delegated day to day management, site plan review and inspection, and reporting to the Town's **Conservation Agent**. The **Conservation Agent** is responsible for coordinating the efforts of other departments when needed, ensuring that necessary interdepartmental communication occurs in a timely manner, and following up with other departments as needed regarding the status of their efforts.

Key contacts and roles for each of the other departments are as follows:

**Table 2: Responsible Parties**

<b>Implementation Role</b>	<b>Responsible Authority/Individual</b>
Construction Stormwater Enforcement Authority	<b>Conservation Commission</b>
Overall Supervision of Construction Stormwater Program	<b>Conservation Agent</b>
Person(s) Responsible for Site Plan Review	<b>Landis Hershey, Conservation Agent</b>
Person(s) Authorized to Conduct Construction Site Inspection on Behalf of the Town	Landis Hershey, Conservation Agent Engineering Department
Enforcement Authority for Construction Stormwater Compliance	<b>Conservation Commission</b>
Legal Support for Enforcement Actions	<b>Town Council, Kopelman and Paige</b>
Person(s) Responsible for Construction Stormwater Recordkeeping	<b>Conservation Agent</b>
Planning Board	Building Inspector Town Engineer

## 1.5 Construction Site Stormwater Runoff Control Program

Consistent with the requirements of the MS4 Permit, the Town is implementing and enforcing a program to reduce pollutants in stormwater runoff discharged from all construction activities. The objective of the construction site stormwater runoff control program is described in Section 2.3.5 of the 2016 MS4 permit. The Town's program includes the following key elements:

- 1) The **Stormwater and Erosion Control Bylaw** ("Bylaw") is consistent with 2.3.5.c.i to accomplish the following required elements of the construction site stormwater runoff program. The location of the Town's **Stormwater and Erosion Control Bylaw** is provided in Table 4. The **Town adopted the Bylaw in 5-7-2007, SATM Article 29** and is scheduled to adopt revisions before 6/30/2020. The Conservation Commission is currently working on revisions to the Bylaw regulations with the most recent revision on **06/12/2019**.
  
- 2) The Bylaw presently:
  - A. Regulates land disturbance of **40,000 s.f** consistent with MS4 Permit part 2.3.5.a and disturbances of less than this area threshold if part of a larger common plan of development or sale that would exceed the threshold;
  
  - B. Establishes authority for conducting site inspections, taking enforcement action and imposing sanctions as described further below and consistent with MS4 Permit part 2.3.5.c.ii.
  
  - C. Establishes the following requirements and standards for erosion and sediment control BMPs consistent with MS4 Permit part 2.3.5.c.iii;
    - Compliance with the MA Stormwater Policy and Handbook
    - Minimize the amount of disturbed area and protect natural resources;
    - Stabilize sites when projects are complete or operations have temporarily ceased;
    - Protect slopes on the construction site;
    - Protect all storm drain inlets and armor all newly constructed outlets;
    - Use perimeter controls at the site;
    - Stabilize construction site entrances and exits to prevent off-site tracking;
    - Inspect stormwater controls at consistent intervals
  
  - D. Establishes requirements for construction site operators to control wastes such as concrete washout, discarded building materials, chemicals, litter, and sanitary waste consistent with MS4 Permit part 2.3.5.c.iv;

E. Establishes the written procedures for pre-construction site plan review consistent with MS4 Permit part 2.3.5.c.v. including requirements for review of:

- Site design
- Planned operations at the construction site
- Planned sediment and erosion control BMPs to be use during the construction phase
- Planned BMPs to manage runoff after construction (See the section on “Post Construction Runoff Controls” in this SWMP)
- Consideration of potential water quality impacts
- Receipt and consideration of information received from the public
- Required evaluation of opportunities for the use of low impact development and green infrastructure, and encouragement for the utilization of these methods were feasible

3) **Site Inspections:** The Town has been conducting site inspections of all sites under the jurisdiction of the Wetlands Protection Bylaw and the SWEC Bylaw however documentation of inspections were not conducted.

4) **Written Procedures for Site Inspections:** The Town is in the process of revising the Bylaw to include inspection procedures, site inspector qualifications, and site inspection tracking protocols that are consistent with MS4 Permit part 2.3.5.c.v. These policies and procedures supplement the authority to conduct site inspections established by the *Town’s Stormwater and Erosion Control Bylaw*. The Town’s site inspection procedures are scheduled to be amended before 6/30/2020 and can be found in Table 4 below.

Proposed Revisions to the Bylaw Regulations:

8.0 Erosion and Sedimentation Control Inspections: Inspections will occur at a minimum of twice during the construction project to review that the site is in compliance with the requirements of the Regulations and the Bylaw.

8.1 All erosion control and sedimentation practices will be inspected using the Erosion and Sedimentation Control Form during the construction project by the Conservation Agent.

8.2 The construction site will be inspected for compliance with the management of demolition debris, litter and sanitary waste and other construction debris as specified in section 6: Water course protection and section 7: Control of Construction Debris of the Bylaw.

8.3 The Conservation Agent will provide a copy of the inspection form to the development site operator, applicant and/or owner.

8.4 The Conservation Commission and/or the Conservation Agent may fine the development site operator, Applicant and/or owner for violations of the sedimentation and erosion control requirements of this Bylaw as allowed in section 15 of this Bylaw. .

## 1.6 Measurable Goals

**Table 3: Construction Site Stormwater Runoff Control Measurable Goals**

<b>BMP #</b>	<b>BMP Description</b>	<b>Measurable Goals</b>	<b>Date Adopted / Amended</b>
<b>1</b>	Sediment and Erosion Control Bylaw	Adopted <b>Stormwater and Erosion Control Bylaw</b> . Review and update as needed.	<b>5-7-2007</b>
<b>2</b>	Site Plan Review Procedures	Conduct site plan review of 100% of jurisdictional project sites according to the procedures outlined above	<b>11-14-2007</b> Regulations
<b>3</b>	Site Inspection Procedures	Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed	<b>11/14/2007</b>
<b>4</b>	Document Site Inspections	Approve written Procedures and document inspections	<b>Being reviewed</b>

## 1.7 Annual Reporting

The Town submits annual reports each year consistent with MS4 Permit part 2.3.5.c.v. The following indicators are tracked and included with the annual report:

- Number of project plans reviewed
- Number of construction site inspections performed, and percentage of sites inspected, and
- Number of enforcement actions undertaken.

The responsibility for supervising the reporting process is as indicated in Table 2 above.

## 1.8 Key Program Documents

Table 4 provides an overview of key program reference documents and where they can be found. Note that forms in Table 4 may be used as either paper forms or electronic equivalents.

**Table 4: Summary of Key Protocols, SOPs and Forms**

<b>Category</b>	<b>Included Documents</b>	<b>Document Location</b>
E&S Bylaw	<b>Stormwater and Erosion Control Bylaw</b>	<a href="https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information">https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information</a>
E&S Regulations	<b>Stormwater and Erosion Control Bylaw Regulations</b>	<a href="https://www.walpole-ma.gov/conservation-">https://www.walpole-ma.gov/conservation-</a>

		commission/pages/stormwater-information
E&S Design Standards	<b>Massachusetts Stormwater Handbook and Stormwater Standards</b> <b>Massachusetts Erosion and Sediment Control Guidelines, MassDEP</b>	
E&S Site Plan Review Procedures	<b>Stormwater and Erosion Control Bylaw and Wetland Protection Bylaw</b>	<a href="https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information">https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information</a>
Construction Site Inspection and Enforcement Procedures	<b>Construction site inspection form for BMP's</b> <b>Erosion control site inspection form</b> <b>Enforcement Procedures</b>	<a href="https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information">https://www.walpole-ma.gov/conservation-commission/pages/stormwater-information</a>

## 1.9 References

Central Massachusetts Regional Stormwater Coalition. Standard Operating Procedures # 5, 6, and 9. Retrieved February 11 2018, from

<https://www.centralmastormwater.org/toolbox/pages/standard-operating-procedures>

Commonwealth of Massachusetts. Massachusetts Wetland Protection Act. Massachusetts General Laws Chapter 131 § 40. Accessed online at:

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIX/Chapter131/Section40>

USEPA, July 2018. General Permits For Stormwater Discharges From Small Municipal Separate Storm Sewer Systems In Massachusetts. USEPA. Accessed online at:

<https://www3.epa.gov/region1/npdes/stormwater/ma/2016fpd/final-2016-ma-sms4-gp.pdf>

USEPA, 2017. National Pollutant Discharge and Elimination System (NPDES) Construction General Permit (CGP). USEPA. Accessed online at: [https://www.epa.gov/npdes/epas-](https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents)

[2017-construction-general-permit-cgp-and-related-documents](https://www.epa.gov/npdes/epas-2017-construction-general-permit-cgp-and-related-documents)

Massachusetts Department of Environmental Protection (MassDEP). Wetlands Protection Act Regulations. Code of Massachusetts Regulations Title 310 10.00. Accessed online at:

<https://www.mass.gov/files/documents/2016/08/vy/310cmr10a.pdf>

Envirocert International CPESC Program Information, Requirements, and Fees

<https://www.envirocertintl.org/cpesc/cpesc-requirements-fees-processes/>

### **Town of Norwood filing Guidelines**

### **1.10 Construction Site Stormwater Runoff Program Attachments**

Copies of program attachments referenced in Table 4, if any, are included below.